CLAIMS:

1. A method of sealing a subterranean zone penetrated by a wellbore comprising:

mixing a cement mix comprising a base blend comprising zeolite and at least one cementitious material with a mixing fluid to form a cement composition;

placing the cement composition into the subterranean zone; and

allowing the cement composition to set therein.

2. The method of claim 1 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b]\ xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

3. The method of claim 1, wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

4. The method of claim 1 wherein the base blend comprises from about 20 to about 50 weight percent zeolite.

5. The method of claim 1 wherein the base blend comprises from about 30 to about 90 weight percent zeolite.

6. The method of claim 1 wherein the base blend comprises from about 5 to about 75 weight percent zeolite.

7. The method of claim 1 wherein the base blend comprises from about 50 to about 75 weight percent zeolite.

8. The method of claim 1 wherein the base blend comprises from about 0.5 to about 35 weight percent zeolite.

9. The method of claim 1 wherein the cement mix comprises a base blend comprising at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

10. The method of claim 9 wherein the cement mix further comprises fly ash.

11. The method of claim 1 wherein the mixing fluid is present in a range of about 22% to about 200% by weight of the base blend.

12. The method of claim 1 wherein the mixing fluid is present in a range of about 40% to about 135% by weight of the base blend.

13. The method of claim 1 wherein the cement composition further comprises at least one accelerating additive.

14. The method of claim 13 wherein the at least one accelerating additive is selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

15. The method of claim 14 wherein the cement composition comprises at least two accelerating additives selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

16. The method of claim 15 wherein at least one accelerating additive is selected from the group consisting of sodium sulfate, calcium sulfate, and potassium sulfate; and at least one accelerating additive is selected from the group consisting of sodium carbonate, calcium carbonate, and potassium carbonate.

17. The method of claim 1 wherein the cement mix comprises:

a base blend comprising zeolite and at least one cementitious material; and

at least one accelerating additive in an amount of about 0.5% to about 10% by weight of the base blend.

18. The method of claim 17 wherein the accelerating additive is present in the base blend in an amount of about 3% to about 7% by weight of the base blend.

19. The method of claim 1 wherein the cement composition further comprises a fluid loss control additive selected from the group consisting of anionic water based soluble polymers, hydrophobically modified anionic water based soluble polymers, non-ionic water based soluble polymers and hydrophobically modified non-ionic water based soluble polymers.

20. The method of claim 1 wherein the cement composition further comprises a fluid loss control additive selected from the group consisting of hydroxyethylcellulose, hydrophobically

modified hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, guar, modified guar, polyvinyl alcohol, montmorillonite clay, anhydrous sodium silicate, grafted polymers prepared by the polymerization of monomers or salts of monomers of N,N-dimethylacrylamide, 2-acrylamido-2-methylpropanesulfonic acid and acrylonitrile having a lignin or lignite or other backbone, and copolymers or salts of copolymers of N,N-dimethylacrylamide (NNDMA) and 2-acrylamido, 2-methyl propane sulfonic acid (AMPS).

21. The method of claim 1 wherein the cement mix further comprises:

a base blend comprising zeolite and at least one cementitous material; and

at least one fluid loss control additive in an amount of about 0.5% to about 1.0% by weight of the base blend.

22. The method of claim 1 wherein a flow enhancing agent is absorbed on the zeolite.

23. The method of claim 22 wherein the flow enhancing agent is present in an amount of from about 15% to about 25% by weight of the zeolite.

24. The method of claim 1 wherein the base blend comprises zeolite in an amount of from about 35% to about 50% of the weight of the base blend, and the cement composition formed has a density equal up to about 13.5 lb/gal.

25. The method of claim 1 wherein the zeolite has a mean particle size of about 100 microns or less.

26. The method of claim 1 wherein the zeolite has a mean particle size from about 3 microns to about 15 microns.

27. The method of claim 1 further comprising reducing an apparent viscosity of the cement composition wherein the reduction is caused by dispersant properties of the zeolite.

28. The method of claim 1 wherein the mixing fluid comprises water.

29. The method of claim 28 wherein the mixing fluid further comprises a defoaming agent.

30. The method of claim 28 wherein the mixing fluid further comprises bentonite.

31. The method of claim 1 further comprising preparing the base blend by mixing zeolite and at least one cementitious material.

32. The method of claim 31 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 20 to about 50 weight percent with at least one cementitious material.

33. The method of claim 31 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 30 to about 90 weight percent with at least one cementitious material.

34. The method of claim 31 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 5 to about 75 weight percent with at least one cementitious material.

35. The method of claim 31 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 50 to about 75 weight percent with at least one cementitious material.

36. The method of claim 31 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 0.5 to about 35 weight percent with at least one cementitious material.

37. The method of claim 31 wherein the base blend comprises at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

38. The method of claim 37 wherein the cement mix further comprises fly ash.

39. The method of claim 31 wherein the preparing of the base blend comprises:

preparing a base blend comprising zeolite and at least one cementitious material; and

adding at least one accelerating additive to the base blend in an amount of about 0.5% to about 10% by weight of the base blend.

40. The method of claim 39 wherein the accelerating additive is added to the base blend in an amount of about 3% to about 7% by weight of the base blend.

41. The method of claim 31 wherein the preparing of the base blend further comprises adding at least one fluid loss control additive to the base blend in an amount of about 0.5% to about 1.0% by weight of the base blend.

42. The method of claim 31 further comprising absorbing a flow enhancing agent on the zeolite prior to the preparing of the base blend.

43. A method for preparing a cement mix comprising

mixing zeolite and at least one cementitious material to form a base blend comprising the cement mix.

44. The method of claim 43 wherein the preparing of the cement mix comprises mixing zeolite in an amount from about 20 to about 50 weight percent with at least one cementitious material.

45. The method of claim 43 wherein the preparing of the cement mix comprises mixing zeolite in an amount from about 30 to about 90 weight percent with at least one cementitious material.

46. The method of claim 43 wherein the preparing of the cement mix comprises mixing zeolite in an amount from about 5 to about 75 weight percent with at least one cementitious material.

47. The method of claim 43 wherein the preparing of the cement mix comprises mixing zeolite in an amount from about 50 to about 75 weight percent with at least one cementitious material.

48. The method of claim 43 wherein the preparing of the cement mix comprises mixing zeolite in an amount from about 0.5 to about 35 weight percent with at least one cementitious material.

49. The method of claim 43 wherein the cement mix comprises a base blend comprising at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

50. The method of claim 49 wherein the cement mix further comprises fly ash.

51. The method of claim 43 wherein the preparing of the cement mix further comprises adding at least one accelerating additive to the base blend in an amount of from about 0.5% to about 10% by weight of the base blend.

52. The method of claim 51 wherein the accelerating additive is added to the base blend in an amount of from about 3% to about 7% by weight of the base blend.

53. The method of claim 43 wherein the preparing of the cement mix further comprises adding at least one fluid loss control additive to the base blend in an amount of from about 0.5% to about 1.0% by weight of the base blend.

54. The method of claim 43 further comprising absorbing a flow enhancing agent on the zeolite prior to the preparing of the cement mix.

55. A method of sealing a subterranean zone penetrated by a wellbore comprising:

blending a cement mix comprising a base blend with an aqueous zeolite suspension to form a cement composition;

placing the cement composition into the subterranean zone; and

allowing the cement composition to set therein.

56. The method of claim 55 wherein the aqueous zeolite suspension comprises zeolite represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b]\ \ xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba,NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4N$, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

57. The method of claim 55, wherein the aqueous zeolite suspension comprises zeolite selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

58. The method of claim 55 further comprising

mixing zeolite with a mixing fluid to form the aqueous zeolite suspension.

59. The method of claim 58 wherein the aqueous zeolite suspension is formed by mixing zeolite in an amount from about 40 to about 50 weight percent with the mixing fluid.

60. The method of claim 58 wherein the mixing fluid comprises water.

61. The method of claim 58 wherein the aqueous zeolite suspension is stable for at least two weeks before the blending with the cement mix.

62. The method of claim 55 wherein the cement mix comprises a base blend comprising at least one cementitious material.

63. The method of claim 62 wherein the cement mix further comprises hydrated lime.

64. The method of claim 55 wherein the blending further comprises blending the aqueous zeolite suspension in an amount of about 1-150% by weight of the base blend with the cement mix.

65. The method of claim 55 further comprising mixing the aqueous zeolite suspension with a mixing fluid before the blending of the aqueous zeolite suspension with the cement mix.

66. The method of claim 65 wherein the mixing fluid comprises water.

67. The method of claim 65 further comprising mixing the cement mix with a mixing fluid before the blending of the cement mix with the aqueous zeolite suspension.

68. The method of claim 55 further comprising mixing the cement mix with a mixing fluid before the blending of the cement mix with the aqueous zeolite suspension.

69. The method of claim 55 further comprising adding lightweight materials to the aqueous zeolite suspension prior to the blending of the aqueous zeolite suspension with the cement mix.

70. The method of claim 69 further comprising adding the lightweight materials to the aqueous zeolite suspension in an amount of from about 1% to about 70% by weight of the base blend comprising the cement mix.

71. The method of claim 70 further comprising

mixing zeolite with a mixing fluid to form the aqueous zeolite suspension; and

adding at least one lightweight material to the aqueous zeolite suspension.

72. The method of claim 71 further comprising

mixing the cement mix with a mixing fluid prior to the blending of the aqueous zeolite suspension with the cement mix.

73. The method of claim 72 further comprising blending the aqueous zeolite suspension with the cement mix to form a cement composition having a density less than about 12 lb/gal.

74. A method of sealing a subterranean zone penetrated by a wellbore comprising:

mixing a cement mix comprising a base blend comprising zeolite and at least one cementitious material with a mixing fluid to form an unfoamed cement composition;

foaming the unfoamed cement composition to form a foamed cement composition;

placing the foamed cement composition into the subterranean zone; and

allowing the foamed cement composition to set therein.

75. The method of claim 74 wherein the cement mix further comprises bentonite.

76. The method of claim 74 wherein the foamed cement composition has a density of at least 8 lb/gal.

77. The method of claim 74 wherein the base blend from about 20 to about 40 weight percent zeolite.

78. The method of claim 74 further comprising blending the cement mix with an aqueous zeolite suspension prior to the foaming.

79. The method of claim 78 further comprising forming the aqueous zeolite suspension by mixing zeolite in an amount from about 40 to about 50 weight percent with a mixing fluid.

80. The method of claim 78 wherein the foamed cement composition is stabilized by the zeolite in the aqueous zeolite suspension.

81. The method of claim 74 wherein the foamed cement composition is stabilized caused by the zeolite in the base blend.

82. The method of claim 74 further comprising preparing the cement mix by mixing zeolite and at least one cementitious material to form the base blend.

83. The method of claim 82 further comprising mixing the zeolite and the at least one cementitious material with bentonite.

84. The method of claim 82 wherein the forming of the base blend comprises mixing the zeolite in an amount from about 20 to about 40 weight percent with the at least one cementitious material.

85. A method for making a cement composition comprising

mixing a cement mix comprising a base blend comprising cementitious material and zeolite with a mixing fluid.

86. The method of claim 85 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b] \quad xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

87. The method of claim 85, wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

88. The method of claim 85 wherein the base blend comprises from about 20 to about 50 weight percent zeolite.

89. The method of claim 85 wherein the base blend comprises from about 30 to about 90 weight percent zeolite.

90. The method of claim 85 wherein the base blend comprises from about 5 to about 75 weight percent zeolite.

91. The method of claim 85 wherein the base blend comprises from about 50 to about 75 weight percent zeolite.

92. The method of claim 85 wherein the base blend comprises from about 0.5 to about 35 weight percent zeolite.

93. The method of claim 85 wherein the cement mix comprises at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

94. The method of claim 93 wherein the cement mix further comprises fly ash.

95. The method of claim 85 further comprising mixing the cement mix with mixing fluid that is present in a range of from about 22% to about 200% by weight of the base blend.

96. The method of claim 85 further comprising mixing the cement mix with mixing fluid that is present in a range of from about 40% to about 135% by weight of the base blend.

97. The method of claim 85 further comprising mixing the cement mix comprising the base blend with at least one accelerating additive.

98. The method of claim 97 wherein the at least one accelerating additive is selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

99. The method of claim 98 wherein at least two accelerating additives are selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

100. The method of claim 99 wherein at least one accelerating additive is selected from the group consisting of sodium sulfate, calcium sulfate, and potassium sulfate; and at least one accelerating additive is selected from the group consisting of sodium carbonate, calcium carbonate, and potassium carbonate.

101. The method of claim 85 wherein the cement mix comprises:

a base blend comprising zeolite and at least one cementitious material; and

at least one accelerating additive in an amount of from about 0.5% to about 10% by weight of the base blend.

102. The method of claim 101 wherein the accelerating additive is present in an amount of from about 3% to about 7% by weight of the base blend.

103. The method of claim 85 further comprising mixing the cement mix comprising the base blend with a fluid loss control additive selected from the group consisting of anionic water based soluble polymers, hydrophobically modified anionic water based soluble polymers, non-ionic water based soluble polymers and hydrophobically modified non-ionic water based soluble polymers.

104. The method of claim 85 further comprising mixing the cement mix comprising the base blend with a fluid loss control additive selected from the group consisting of hydroxyethylcellulose, hydrophobically modified hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, guar, modified guar, polyvinyl alcohol, montmorillonite clay, anhydrous sodium silicate, grafted polymers prepared by the polymerization of monomers or salts of monomers of N,N-dimethylacrylamide, 2-acrylamido-2-methylpropanesulfonic acid and acrylonitrile having a lignin or lignite or other backbone, and copolymers or salts of

copolymers of N,N-dimethylacrylamide (NNDMA) and 2-acrylamido, 2-methyl propane sulfonic acid (AMPS).

105. The method of claim 85 wherein the cement mix further comprises at least one fluid loss control additive in an amount of from about 0.5% to about 1.0% by weight of the base blend.

106. The method of claim 85 further comprising absorbing a flow enhancing agent on the zeolite.

107. The method of claim 106 wherein the flow enhancing agent is present in an amount of from about 15% to about 25% by weight of the zeolite.

108. The method of claim 85 wherein the base blend comprises from about 35 to about 50 weight percent zeolite, and the cement composition formed has a density up to about 13.5 lb/gal.

109. The method of claim 85 wherein the zeolite has a mean particle size of about 100 microns or less.

110. The method of claim 85 wherein the zeolite has a mean particle size from about 3 microns to about 15 microns.

111. The method of claim 85 wherein the apparent viscosity of the cement composition is reduced by the zeolite.

112. The method of claim 85 wherein the mixing fluid comprises water.

113. The method of claim 112 wherein the mixing fluid further comprises a defoaming agent.

114. The method of claim 112 wherein the mixing fluid further comprises bentonite.

115. The method of claim 85 further comprising preparing the cement mix by preparing the base blend by mixing the cementitious material and the zeolite.

116. The method of claim 115 wherein the preparing of the base blend comprises mixing zeolite in an amount about 20 to about 50 weight percent with the cementitious material.

117. The method of claim 115 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 30 to about 90 weight percent with the cementitious material .

118. The method of claim 115 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 5 to about 75 weight percent with the cementitious material.

119. The method of claim 115 wherein the preparing of the base blend comprises mixing zeolite in an amount from about 50 to about 75 weight percent with the cementitious material.

120. The method of claim 115 wherein the preparing of the base blend comprises mixing zeolite in the amount from about 0.5 to about 35 weight percent with the cementitious material.

121. The method of claim 115 wherein the preparing of the cement mix further comprises adding at least one accelerating additive to the base blend in an amount of from about 0.5% to about 10% by weight of the base blend.

122. The method of claim 121 further comprising adding the accelerating additive to the base blend in an amount of from about 3% to about 7% by weight of the base blend.

123. The method of claim 115 wherein the preparing of the cement mix further comprises adding at least one fluid loss control additive to the base blend in an amount of about 0.5% to about 1.0% by weight of the base blend.

124. The method of claim 115 further comprising absorbing a flow enhancing agent on the zeolite prior to the preparing of the base blend.

125. A method for making a cement composition comprising

blending a cement mix comprising a base blend with an aqueous zeolite suspension.

126. The method of claim 125 wherein the aqueous zeolite suspension comprises zeolite represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b]\ xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba,NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4N$, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

127. The method of claim 126, wherein the aqueous zeolite suspension comprises zeolite selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

128. The method of claim 126 further comprising

mixing zeolite with a mixing fluid to form the aqueous zeolite suspension.

129. The method of claim 128 wherein the aqueous zeolite suspension is formed by mixing zeoite in an amount of from about 40 to about 50 by weight percent with the mixing fluid.

130. The method of claim 128 wherein the mixing fluid comprises water.

131. The method of claim 128 wherein the aqueous zeolite suspension is stable for at least two weeks before the blending with the cement mix.

132. The method of claim 125 wherein the base blend comprises at least one cementitious material.

133. The method of claim 132 wherein the cement mix further comprises hydrated lime.

134. The method of claim 125 wherein the blending further comprises blending the aqueous zeolite suspension in an amount of from about 1% to about 150% by weight of the base blend with the cement mix.

135. The method of claim 125 further comprising mixing the aqueous zeolite suspension with a mixing fluid before the blending of the aqueous zeolite suspension with the cement mix.

136. The method of claim 135 wherein the mixing fluid comprises water.

137. The method of claim 135 further comprising mixing the cement mix with a mixing fluid before the blending of the cement mix with the aqueous zeolite suspension.

138. The method of claim 125 further comprising mixing the cement mix with a mixing fluid before the blending of the cement mix with the aqueous zeolite suspension.

139. The method of claim 125 further comprising adding lightweight materials to the aqueous zeolite suspension prior to the blending of the aqueous zeolite suspension with the cement mix.

140. The method of claim 139 further comprising adding the lightweight materials to the aqueous zeolite suspension in an amount of from about 1% to about 70% by weight of the base blend comprising the cement mix.

141. The method of claim 139 further comprising

mixing zeolite with a mixing fluid to form the aqueous zeolite suspension; and

adding at least one lightweight material to the aqueous zeolite suspension.

142. The method of claim 141 further comprising

mixing the cement mix with a mixing fluid prior to the blending of the aqueous zeolite suspension with the cement mix.

143. The method of claim 142 further comprising blending the aqueous zeolite suspension with the cement mix to form a cement composition having a density less than about 12 lb/gal.

144. A method for making a foamed cement composition comprising:

mixing a cement mix comprising a base blend comprising zeolite and at least one cementitious material with a mixing fluid to form an unfoamed cement composition; and

foaming the unfoamed cement composition to form the foamed cement composition.

145. The method of claim 144 wherein the cement mix further comprises bentonite.

146. The method of claim 144 wherein the foamed cement composition has a density of at least 8 lb/gal.

147. The method of claim 144 wherein the base blend comprises from about 20 to about 40 weight percent zeolite.

148. The method of claim 144 further comprising blending the cement mix with an aqueous zeolite suspension prior to the foaming.

149. The method of claim 148 further comprising

forming the aqueous zeolite suspension by mixing zeolite in an amount of from about 40 to about 50 weight percent with a mixing fluid.

150. The method of claim 148 wherein the foam cement composition is stabilized by the zeolite in the aqueous zeolite suspension.

151. The method of claim 144 wherein the foam cement composition is stabilized by the zeolite in the base blend.

152. The method of claim 144 further comprising preparing the base blend by mixing the zeolite and the at least one cementitious material.

153. The method of claim 152 further comprising mixing bentonite with the base blend.

154. The method of claim 152 further comprising mixing the zeolite in an amount from about 20 to about 40 weight percent with the at least one cementitious material.

155. A cement composition comprising:

zeolite, cementitious material, and a mixing fluid.

156. The cement composition of claim 155 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b] \quad xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

157. The cement composition of claim 155, wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

158. The cement composition of claim 155 wherein the zeolite is present in the cement composition as an additive.

159. The cement composition of claim 158 further comprising a lightweight additive.

160. The cement composition of claim 158 further comprising a dispersant.

161. The cement composition of claim 155 wherein the at least one cementitious material is selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

162. The cement composition of claim 161 further comprising fly ash.

163. The cement composition of claim 155 further comprising at least one accelerating additive.

164. The cement composition of claim 163 wherein the at least one accelerating additive is selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

165. The cement composition of claim 164 wherein the cement composition comprises at least two accelerating additives selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

166. The cement composition of claim 165 wherein at least one of the accelerating additives is selected from the group consisting of sodium sulfate, calcium sulfate, and potassium sulfate; and at least one of the accelerating additives is selected from the group consisting of sodium carbonate, calcium carbonate, and potassium carbonate.

167. The cement composition of claim 155 further comprising a fluid loss control additive selected from the group consisting of anionic water based soluble polymers, hydrophobically modified anionic water based soluble polymers, non-ionic water based soluble polymers and hydrophobically modified non-ionic water based soluble polymers.

168. The cement composition of claim 155 further comprising a fluid loss control additive selected from the group consisting of hydroxyethylcellulose, hydrophobically modified hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, guar, modified guar, polyvinyl alcohol, montmorillonite clay, anhydrous sodium silicate, grafted polymers prepared by the polymerization of monomers or salts of monomers of N,N-dimethylacrylamide, 2-acrylamido-2-

methylpropanesulfonic acid and acrylonitrile having a lignin or lignite or other backbone, and copolymers or salts of copolymers of N,N-dimethylacrylamide (NNDMA) and 2-acrylamido, 2-methyl propane sulfonic acid (AMPS).

169. The cement composition of claim 155 wherein a flow enhancing agent is absorbed on the zeolite.

170. The cement composition of claim 155 wherein the cement composition has a density up to about 13.5 lb/gal.

171. The cement composition of claim 155 wherein the zeolite has a mean particle size of about 100 microns or less.

172. The cement composition of claim 155 wherein the zeolite has a mean particle size of from about 3 microns to about 15 microns.

173. The cement composition of claim 155 wherein the mixing fluid comprises water.

174. The cement composition of claim 173 wherein the mixing fluid further comprises a defoaming agent.

175. The cement composition of claim 173 wherein the mixing fluid further comprises bentonite.

176. A cement mix comprising a base blend comprising zeolite and at least one cementitious material.

177. The cement mix of claim 176 wherein the zeolite is represented by the formula:

$$M_{a/n}[(AlO_2)_a(SiO_2)_b]\ xH_2O$$

where M represents one or more cations selected from the group consisting of Na, K, Mg, Ca, Sr, Li, Ba, NH_4, CH_3NH_3, $(CH_3)_3NH$, $(CH_3)_4$ N, Ga, Ge and P; n represents the cation valence; the ratio of b:a is in a range from greater than or equal to 1 and less than or equal to 5; and x represents the moles of water entrained into the zeolite framework.

178. The cement mix of claim 176, wherein the zeolite is selected from the group consisting of analcime, bikitaite, brewsterite, chabazite, clinoptilolite, faujasite, harmotome, heulandite, laumontite, mesolite, natrolite, paulingite, phillipsite, scolecite, stellerite, stilbite, and thomsonite.

179. The cement mix of claim 176 wherein the base blend comprises from about 20 to about 50 weight percent zeolite.

180. The cement mix of claim 176 wherein the base blend comprises from about 30 to about 90 weight percent zeolite.

181. The cement mix of claim 176 wherein the base blend comprises from about 5 to about 75 weight percent zeolite.

182. The cement mix of claim 176 wherein the base blend comprises from about 50 to about 75 weight percent zeolite.

183. The cement mix of claim 176 wherein the base blend comprises from about 0.5 to about 35 weight percent zeolite.

184. The cement mix of claim 176 wherein the base blend comprises at least one cementitious material selected from the group consisting of micronized cement, Portland cement, pozzolan cement, gypsum cement, aluminous cement, silica cement, and alkaline cement.

185. The cement mix of claim 184 wherein the cement mix further comprises fly ash.

186. The cement mix of claim 176 further comprising at least one accelerating additive.

187. The cement mix of claim 186 wherein the at least one accelerating additive is selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

188. The cement mix of claim 187 further comprising at least two accelerating additives selected from the group consisting of sodium sulfate, sodium carbonate, calcium sulfate, calcium carbonate, potassium sulfate, and potassium carbonate.

189. The cement mix of claim 188 wherein at least one of the accelerating additives is selected from the group consisting of sodium sulfate, calcium sulfate, and potassium sulfate; and at least one of the accelerating additives is selected from the group consisting of sodium carbonate, calcium carbonate, and potassium carbonate.

190. The cement mix of claim 176 further comprising at least one accelerating additive in an amount of from about 0.5% to about 10% by weight of the base blend.

191. The cement mix of claim 190 wherein the accelerating additive is present in an amount of from about 3% to about 7% by weight of the base blend.

192. The cement mix of claim 176 further comprising a fluid loss control additive selected from the group consisting of anionic water based soluble polymers, hydrophobically modified anionic water based soluble polymers, non-ionic water based soluble polymers and hydrophobically modified non-ionic water based soluble polymers.

193. The cement mix of claim 176 further comprising a fluid loss control additive selected from the group consisting of hydroxyethylcellulose, hydrophobically modified hydroxyethylcellulose, carboxymethylhydroxyethylcellulose, guar, modified guar, polyvinyl alcohol, montmorillonite clay, anhydrous sodium silicate, grafted polymers prepared by the polymerization of monomers or salts of monomers of N,N-dimethylacrylamide, 2-acrylamido-2-methylpropanesulfonic acid and acrylonitrile having a lignin or lignite or other backbone, and copolymers or salts of copolymers of N,N-dimethylacrylamide (NNDMA) and 2-acrylamido, 2-methyl propane sulfonic acid (AMPS).

194. The cement mix of claim 176 further comprising at least one fluid loss control additive in an amount of from about 0.5% to about 1.0% by weight of the base blend.

195. The cement mix of claim 176 wherein a flow enhancing agent is absorbed on the zeolite.

196. The cement mix of claim 195 wherein the flow enhancing agent is present in an amount of from about 15% to about 25% by weight of the zeolite.

197. The cement mix of claim 176 wherein the zeolite has a mean particle size of about 100 microns or less.

198. The cement mix of claim 176 wherein the zeolite has a mean particle size of from about 3 microns to about 15 microns.

199. A method of sealing a subterranean zone penetrated by a wellbore comprising:

mixing a base blend comprising at least one cementitious material with zeolite to form a cement mix;

mixing the cement mix with a mixing fluid to form a cement composition;

placing the cement composition into the subterranean zone; and

allowing the cement composition to set therein.

200. The method of claim 199 wherein the cement mix comprises a base blend comprising 100 weight percent of the at least one cementitious material.

201. The method of claim 200 wherein the mixing of the base blend with zeolite further comprises mixing the base blend with zeolite in an amount of from about 5% to about 25% by weight of the base blend.

202. The method of claim 201 wherein the mixing of the base blend with zeolite further comprises mixing a lightweight additive with the base blend and the zeolite.

203. The method of claim 201 wherein the mixing of the base blend with zeolite further comprises mixing a dispersant with the base blend and the zeolite.

204. A method for making a cement composition comprising

mixing a base blend comprising cementitious material with zeolite and a mixing fluid.

205. The method of claim 204 wherein the base blend comprises 100 weight percent of the at least one cementitious material.

206. The method of claim 205 wherein the mixing of the base blend with zeolite further comprises mixing the base blend with zeolite in an amount of from about 5% to about 25% by weight of the base blend.

207. The method of claim 206 wherein the mixing of the base blend with zeolite further comprises mixing a lightweight additive with the base blend and the zeolite.

208. The method of claim 206 wherein the mixing of the base blend with zeolite further comprises mixing a dispersant with the base blend and the zeolite.

209. A cement mix comprising:

a base blend comprising at least one cementitious material; and

zeolite.

210. The cement mix of claim 209 wherein the base blend comprises 100 weight percent of the least one cementitious material.

211. The cement mix of claim 210 wherein the zeolite is present in an amount from about 5% to about 25% by weight of the base blend.

212. The cement mix of claim 210 further comprising a lightweight additive.

213. The cement mix of claim 210 further comprising a dispersant.

214. A method of sealing a subterranean zone penetrated by a wellbore comprising:

mixing a cement mix comprising a base blend comprising at least one cementitious material with an aqueous zeolite suspension and a mixing fluid to form an unfoamed cement composition;

foaming the unfoamed cement composition to form a foamed cement composition;

placing the foamed cement composition into the subterranean zone; and

allowing the foamed cement composition to set therein.

215. The method of claim 214 wherein the cement mix comprises a base blend comprising 100 weight percent of the at least one cementitious material.

216. The method of claim 214 wherein the foamed cement composition is stabilized by the zeolite in the aqueous zeolite suspension.

217. A method for making a foamed cement composition comprising:

mixing a cement mix comprising a base blend comprising at least one cementitious material with an aqueous zeolite suspension and a mixing fluid to form an unfoamed cement composition; and

foaming the unfoamed cement composition to form the foamed cement composition.

218. The method of claim 217 wherein the cement mix comprises a base blend comprising 100 weight percent of the at least one cementitious material.

219. The method of claim 217 further comprising

forming the aqueous zeolite suspension by mixing zeolite in an amount of from about 40 to about 50 weight percent with a mixing fluid.

220. The method of claim 217 wherein the foamed cement composition is stabilized by the zeolite in the aqueous zeolite suspension.